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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/528,340

03/18/2005

Seiji Matsui

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EXAMINER

CHAN, RICHARD

ART UNIT

PAPER NUMBER

2618

DATE MAILED: 10/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/528,340	Applicant(s) MATSUI ET AL.	
	Examiner Richard Chan	Art Unit 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-6,9-11,14 and 15 is/are rejected.
- 7) ☒ Claim(s) 2,3,7,8,12 and 13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/18/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 6, and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Suzuki (US 5,708,968).

With respect to claims 1, 6, and 11, Suzuki discloses the wireless apparatus and method illustrated by flowchart **Fig.8** capable of supporting types of modulation methods having different multi-value numbers, comprising: modulation method switching means for switching (**Priority increasing/decreasing Function**) (**Col.6 lines 3-5**), when another wireless apparatus **C1** to be in wireless connection with the wireless apparatus is capable of supporting said two types of modulation methods, the modulation method between a first modulation method having a smaller multi-value number and a second modulation method having a larger multi-value number (**Col. 4 lines 43-52**), while the wireless apparatus is communicating with said another wireless apparatus; storing means implemented by graph **Fig.6a** for storing a first threshold value **Ac1** of a parameter indicative of communication environment of transmission path between **cells C1-C9**, at which the wireless apparatus can communicate with said another wireless apparatus at least by said second modulation method of said two types of modulation methods; (**Col.6 lines 13-18**) parameter measuring means **CIR** for

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measuring said parameter **CIR** based on a signal received from said another wireless apparatus; **(Col.6 lines 13-22)** parameter comparing means **S3** for comparing, when there is a connection request from said another wireless apparatus to the wireless apparatus, said stored first threshold value **Ac1** of the parameter corresponding to said second modulation method with said measured parameter; **(Col.8 lines 14-21)** and channel allocation determining means for permitting, when it is determined by said parameter comparing means that said measured parameter is not lower than said stored first threshold value **Wc1** of the parameter, allocation of a wireless channel **CH*** to said another wireless apparatus. **(Col.8 lines 13-29)**

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4, 9, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki (US 5,708,968) in view of Yun (5,886,988).

With respect to claims 4, 9, and 14, Suzuki discloses the wireless apparatus, method, and program according to claim 1, 6, and 11, however Suzuki does not

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disclose further comprising means for notifying another wireless apparatus requesting connection to the wireless apparatus about rejection of channel allocation, when said channel allocation determining means rejects allocation of the wireless channel.

The Yun reference **Fig.3** discloses wherein a candidate list of channels is being checked to be considered for assignments in **step 307**, if all channels have been examined the process moves to step **310** otherwise the process moves to step **309** to increment the channel, if no channel is found the call is no longer assigned to this base station, in which another base station must be selected. **(Col.18 lines 44- Col.19 lines 17)**

It would have been obvious to one of ordinary skill in the art to implement the a means of notifying another wireless apparatus about the status of the rejected channel allocation as disclosed by Yun with the wireless apparatus of Suzuki in order to communicate the status of the channel allocation of the total system in order to find an appropriate channel slot for the message or information signal being transmitted.

5. Claims 5,10, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki (US 5,708,968) in view of Patsiokas (US 5,396,648).

With respect to claims 5, 10, and 15, Suzuki discloses the wireless apparatus and method according to claim 1,6, and 11, however Suzuki does not disclose wherein the parameter is based on a reception signal level from another wireless apparatus requesting connection to the wireless apparatus.

The Patsiokas reference however discloses wherein a **RSSI detection module 32** is implemented in order to determine the received signal level in order to determine the strength of the incoming signal. **(Col.2 lines 40-47)**

It would have been obvious to one of ordinary skill in the art to implement the RSSI indication as disclosed by Patsiokas in order to detect the overall level of the received signal and determine the signal is strong enough to be able to be processed by the receiver system.

Allowable Subject Matter

6. Claims 2,3,7,8,12, and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

With respect to claims 2, 7, and 12 Suzuki discloses the channel allocation program apparatus, method, and program as disclosed in claims 1, 6, and 11 however the prior art does not disclose specifically disclose wherein when it is determined that the measured parameter is not lower than said stored second threshold value of the parameter, allocation of a wireless channel to said another wireless apparatus that supports said first modulation method but not said second modulation method.

With respect to claims 3, 8, and 12, Suzuki discloses the channel allocation program apparatus, method, and program as disclosed in claims 1, 6, and 11 however

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the prior art does not specifically disclose the step of determining presence/absence of any empty slot and empty channel in the wireless apparatus, and when there is no empty slot or empty channel, rejecting allocation of a wireless channel regardless of the result of comparison in said parameter comparing step.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The Schilling reference (US 5,367,533) discloses wherein a Dynamic capacity allocation CDMA spread spectrum communications system.

The Ushiorokawa reference (US 5,448,761) discloses a channel assignment in a cellular mobile radio network with a CIR threshold level selected in dependency on priority degrees of channels used in the network.

The Kanai reference (US 5,507,008) discloses a channel assignment method in mobile communication system in which channel which meets predetermined criteria is channel selected.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Chan whose telephone number is (571) 272-0570. The examiner can normally be reached on Mon - Fri (9AM - 5PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on (571)272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Richard Chan
Art Division 2618
09/19/06

EDAN ORGAD
PATENT EXAMINER/TELECOMM.

